A method of increasing angiogenesis in pathological conditions associated with insufficiencies in vascular perfusion, by producing an AT_4 receptor agonist; and administering the AT_4 receptor agonist. A method of inhibiting angiogenesis in pathological conditions, where increased angiogenesis and coincidental vascular perfusion are clinically detrimental, by producing an AT_4 receptor antagonist; and administering the AT_4 receptor antagonist. A method of inhibiting the growth and metastasis of solid tumors, by producing an AT_4 receptor antagonist; and administering the AT_4 receptor antagonist. A method of inhibiting the growth and metastasis of breast cancer, by producing an AT_4 receptor antagonist; and administering the AT_4 receptor antagonist.

In any of the above methods the AT_4 receptor ligand can be administered locally, intravascularly, intramuscularly, intraperitoneally, subcutaneously, or orally.

BRIEF DESCRIPTION OF THE DRAWINGS

SEE ATTACHMENT →

FIGS. 1A and 1B shows the effect of the AT_4 receptor agonist, Nle^1-AngIV (NORLEU), and the AT_4 receptor antagonist, Nle^1, Leu^3-$\Psi(CH_2\text{-}NH_2)^{3\text{-}4}$-Ang IV (NORLEUAL), on the growth of human umbilical vein endothelial cells.

FIG. 2 shows the effect of the AT_4 receptor antagonist on the net deposition of extracellular matrix protein by human dermal fibroblasts and C6 glioma cells.

FIG. 3 shows the effect of various AT_4 receptor ligands on the expression and secretion of matrix metalloproteinases by rabbit cardiac fibroblasts.

FIG. 4 shows the effect of the AT_4 receptor antagonist, NORLEUAL, on the net deposition of extracellular matrix protein by human umbilical vein endothelial cells and +SA-WAZ-2T murine breast cancer cells.

FIG. 5A and 5B show the effect of the AT_4 receptor antagonist, NORLEUAL, on the *ex vivo* development of new blood vessels in the rat aortic ring angiogenesis assay.

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.